Section C:1

Nuclear Material Stabilization

PROJECT MANAGERS

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DOE/RL-2000-76, Rev. 6

SUMMARY

The Nuclear Material Stabilization (NMS) mission consists of the Plutonium Finishing Plant (PFP), WBS 1.4.5 (PBS TP05).

NOTE: The Safety, Conduct of Operations, and Cost/Schedule data contained herein is as of April 30, 2001. Other information is updated as noted.

Fiscal-year-to-date milestone performance (EA, DOE-HQ, and RL) shows that three milestones (60 percent) were completed on or ahead of schedule and two milestones are overdue. Further details can be found in the milestone exception report following the cost and schedule variance analysis.

NOTABLE ACCOMPLISHMENTS

Maintain Safe & Secure SNM

The Remote Material Surveillance System (RMSS) design is complete and the Proximity Card Readers and Surveillance Cameras have been delivered. This upgrade satisfies fire protection requirements, reduces personnel exposure by up to 50 percent in the stabilization areas, and improves 234-5Z and 2736-ZB security access.

Plutonium Facility Deactivation

The Nuclear Materials Stabilization Project (NMSP) is reviewing potential breakthroughs developed by the Accelerated Closure Team (ACT) for possible implementation into NMSP Baseline. The Legacy Holdup Schedule and Basis of Estimate are in development for implementation in the June 30 baseline deliverable to RL.

Maintain Safe and Compliant PFP

Fluor Federal Services has completed the structural assessment of Tank 241-Z-361. The results clearly indicate no issues on structural strength of the tank resulting from the February 28, 2001 earthquake. The ground motion experienced during the earthquake was two orders of magnitude lower than the tank was previously determined to be capable of handling. Through April 30, 2001, there were 512 calendar days (over 1.7 million staff hours) since the last recorded lost workday injury.

Stabilization of Nuclear Material

Residues ¾ The Safety Analysis Report for Packaging (SARP) was approved May 15, 2001. This approval eliminates the requirement to use eighty-five (85) gallon overpacks for packaging and shipment of residues. During May a total of 5.8 kilograms of Hanford Ash were packaged. The first shipment of Hanford Ash to the Central Waste Complex (CWC) was completed on May 17, 2001. Repackaging of the thirty-one (31) Pu/Al Alloys is scheduled for June 4 through June 15.

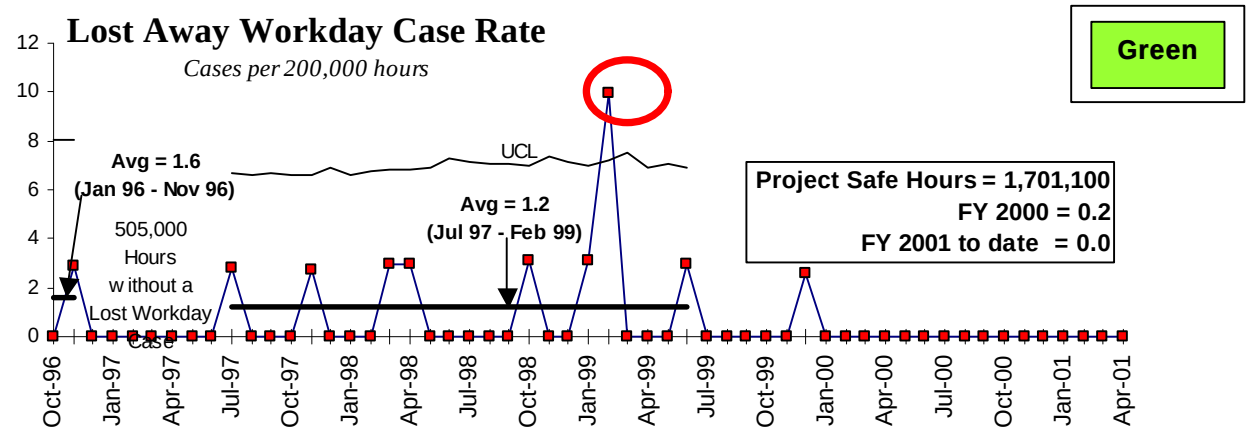
Oxides/Metals ¾ Sixty (60) metal items were brushed and canned into a Bagless Transfer Container (BTC). Fabrication of the BTC/3013 can-piercing device is expected to be completed in early June. Approval of the Authorization Basis for packaging oxides into BTC and 3013 containers was received from RL. Processing of alloys is expected to begin in mid June.

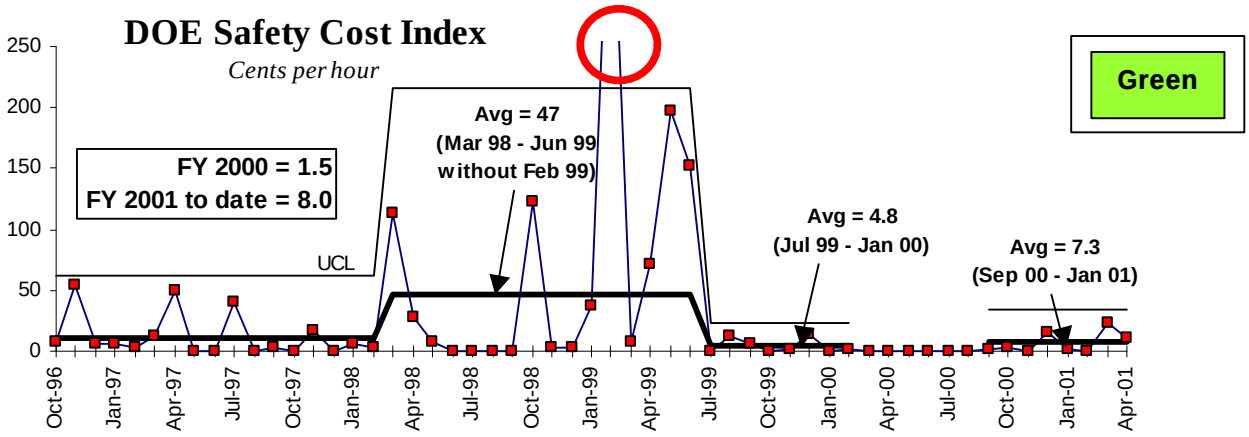
Solutions ¾ A total of forty (40) liters were processed through the magnesium hydroxide [$Mg(OH)_2$] during the month of May, bringing the FYTD total to 499 liters. Forty (40) liters were processed through the furnaces. Quarter scale testing of the oxalate precipitation process was conducted on May 29, 2001 with favorable results. A full-scale test of the process is scheduled for June 16th. The Engineering Change Notice (ECN) and Criticality Safety Evaluation Report (CSER) were approved May 29, 2001 for the second two-boat hot plate. Operation of this second two-boat hot plate is expected in June.

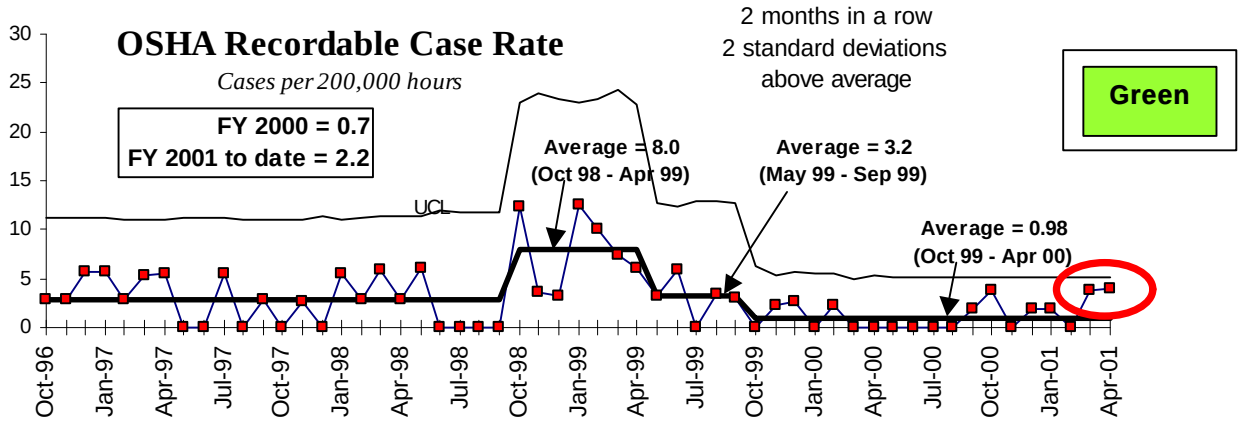
Disposition of Nuclear Material ¾ Production of the 3013 compliant packages continues to exceed the baseline plan. The installation of new generation cutter wheels and weld tips received from SRS has been completed and improvement of the operational reliability of the BTS has been noted. Through May 31, 2001, the Outer Can Welder has produced 125 DOE-STD-3013 containers. The critical path to sustain outer can production will be vault modification. Installation of the first cubicle modification was completed May 24, 2001, and is expected to be operational in early June.

SAFETY

Through May 2001, there were 542 calendar days (over 1.7 million staff hours) since the last recorded lost workday injury. While this is a noticeable increase in comparison to the current baseline OSHA recordable case rate that was established over the past 2 years and had been significantly reduced due to ongoing ISMS/VPP efforts, it is well below the FY99 rate of 7.98. Of the 6 cases reported this year, 2 are sub-contractor personnel and are not reflected in the OSHA 200 Injury Log for NMSP, additionally 50% were work related (strains) and 50% were injuries received while at work (debris in eye caused by wind). The DOE Safety Cost Index existing baseline was recalculated due to growth in days on past cases.







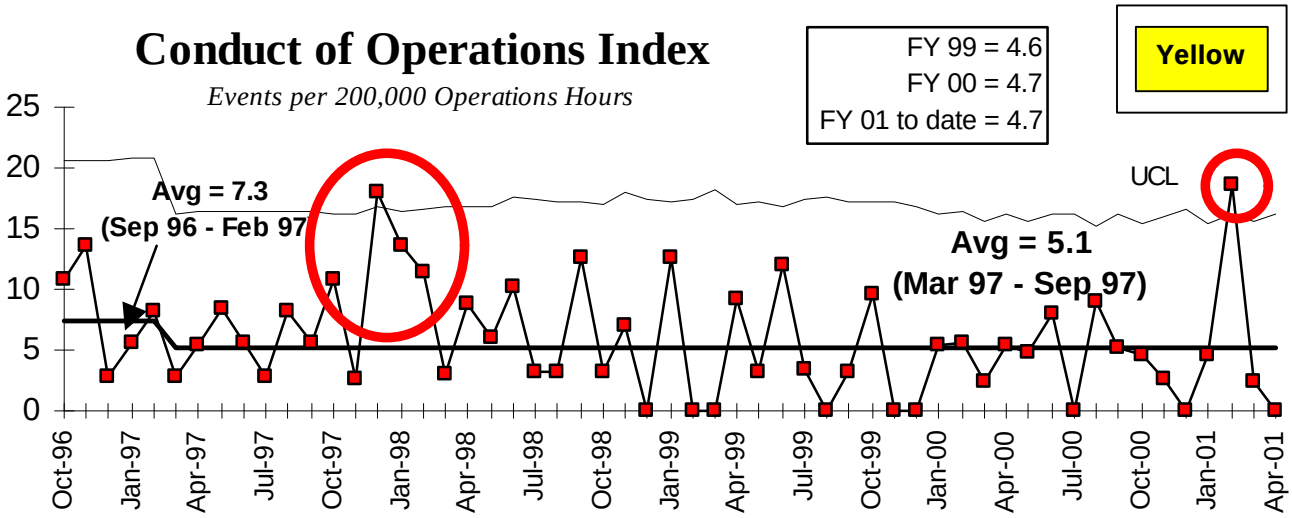
ISMS STATUS

Green

Preparations are continuing for VPP "Star" status application.

CONDUCT OF OPERATIONS

The Conduct of Operations Index has been stable for the past three years at a baseline of 5.1. The current baseline is less than the baseline of 5.6. Weekly Safety meetings and management staff presence in the field continue.



BREAKTHROUGHS / OPPORTUNITIES FOR IMPROVEMENT

Red

Breakthroughs

Project W-460 – Planning is underway to expedite completion of this project by nearly 1 ½ years by fabricating/procuring all of the vault racks during FY 2001 and installing them with plant forces on a just-in-time basis as required to support outer can operations. *(Capital funds are not available this fiscal year. No further status to be provided).*

Opportunities for Improvement

Solutions Stabilization - ¾ Evaluations continue to develop alternate paths to increase throughput and production rates. These include finalizing initial schedules for implementation of an oxalate precipitation process; direct disposition of a portion of the solutions; and operation of a second two-boat hot plate to double the capacity for processing [$Mg(OH)_2$] material prior to the stabilization furnaces.

Yellow

Residues Stabilization - The Safety Analysis Report for Packaging (SARP) was approved May 15. *(No further status to be provided).*

Green

Exposure Reduction - Completed an ALARA evaluation and cost benefit analysis for dose reduction alternatives for the stabilization of the polycube inventory. A shielded can will be used for material transport from the vaults into the glove box system, and shielded tongs will be used for handling the polycubes once the cans have been opened. *(No further status to be provided).*

Green

Upcoming Activities

- Complete Alloy Stabilization by June 30, 2001.
- Complete stabilization and repackaging of plutonium (Pu) metals and oxides in 3013 outer cans by August 31, 2001.
- Complete Project W-460 construction activities by August 31, 2001.

Milestone Achievement

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2001
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	1	0	0	0	0	1	0	2
DOE-HQ	0	0	0	1	0	1	0	2
RL	2	0	0	1	0	2	0	5
Total Project	3	0	0	2	0	4	0	9

Only TPA/EA milestones and all FY2001 overdue and forecast late milestones are addressed in this report. Milestones overdue are deleted from the Milestone Exception Report once they are completed. The following chart summarizes the FY2001 TPA/EA milestone achievement and a Milestone Exception Report follows. The last milestone table summarizes the first six months of FY 2002 TPA/EA milestones.

FY2001 Tri-Party Agreement / EA Milestones			
M-083-07 (TRP-01-515)	**"Complete Repackaging & Shipping of Rocky Flats Ash to the CWC"**	**Due April 30, 2001 –** Completed on March 29, 2001.	Green
M-083-08 (TRP-01-516)	**"Complete Requirements to Ship Rocky Flats Ash to WIPP"**	Due date to be determined based on negotiations for transition of the PFP facility. Negotiations are scheduled to begin in June 2001.	Green
DNFSB Commitments			
M-IP-114 (TRP-01-501) R94-01	**"Ship Alloys to SRS or Complete Stabilization of Alloys"**	**Due June 30, 2001 –** Preliminary activities for alloys stabilization are behind schedule due to priority placed on metals stabilization. Expected start date for alloys stabilization is currently June 14, 2001. Completion is now projected for early August. Group 3 alloys' characterization and stabilization activities continue on schedule.	Red
M-IP-110 (TRP-02-500)	**"Complete Packaging of Metal Inventory"**	**Due August 31, 2001 –** On schedule. The Baseline Change Request (BCR) has been approved by FH and is now awaiting DOE-RL approval to modify the RL milestone completion date consistent with the DOE- HQ Implementation Plan date of August 31, 2001.	Green

MILESTONE EXCEPTION REPORT

Number/WBS	Level	Milestone Title	Baseline Date	Forecast Date

Overdue – 2

TRP-02-500 HQ Complete Packaging of Metal Inventory 03/31/2001 08/31/2001
1.4.5
Cause: The DOE HQ Implementation Plan on DNFSB Recommendation 94-1/2000-1 was revised in January 2001. This revision changed Hanford's packaging of metals inventory milestone from March 31, 2001, to August 31, 2001. This change is required to be consistent with startup of the Outer Can Welder at Hanford.
Impact: No impact to either cost or schedule is anticipated since the current schedule is already based on the 8/31/01 completion.
Corrective Action: A Baseline Change Request is being processed that documents this change.

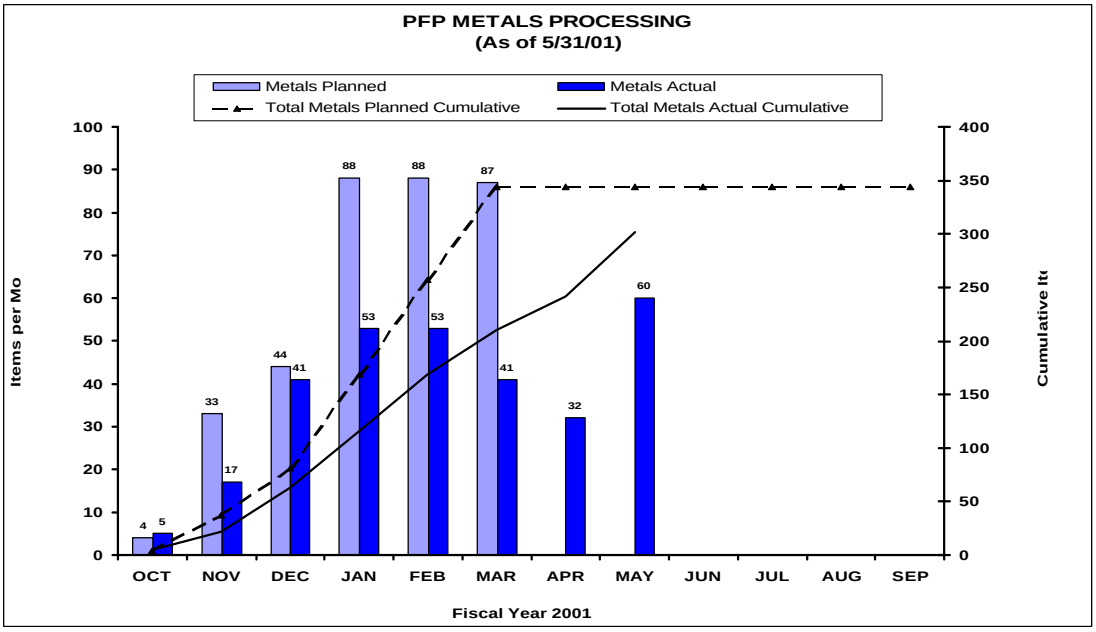
TRP-99-412 RL Complete mods. to One PFP Vault Cubicle 04/02/2001 05/30/2001
1.4.5
Cause: The re-sequencing of Project W-460 workscope, as a result of a change in contractors, resulted in an increased focus on facility modifications and also determined cost efficiencies could be realized through mass fabrication of storage racks rather than individually as previously planned.
Impact: None.
Corrective Action: The modifications to one vault cubicle were completed May 24, 2001. Closeout is in progress.

FY 2002 Tri-Party Agreement / EA Milestones		
Number	Milestone Title	Status
		Nothing to report at this time.
DNFSB Commitments		
M-IP-106 (TRP-01-500) (R94-01)	**"Complete Stabilization & Packaging Plutonium Solutions"**	**Due December 31, 2001 –** Several process improvements are underway including finalizing initial schedules for implementation of an oxalate precipitation process, direct disposition of a portion of the solutions, and installation of a second two-boat hot plate that will double the hot plate capacity for processing material through the magnesium hydroxide process. **Red**

PERFORMANCE OBJECTIVES

Green

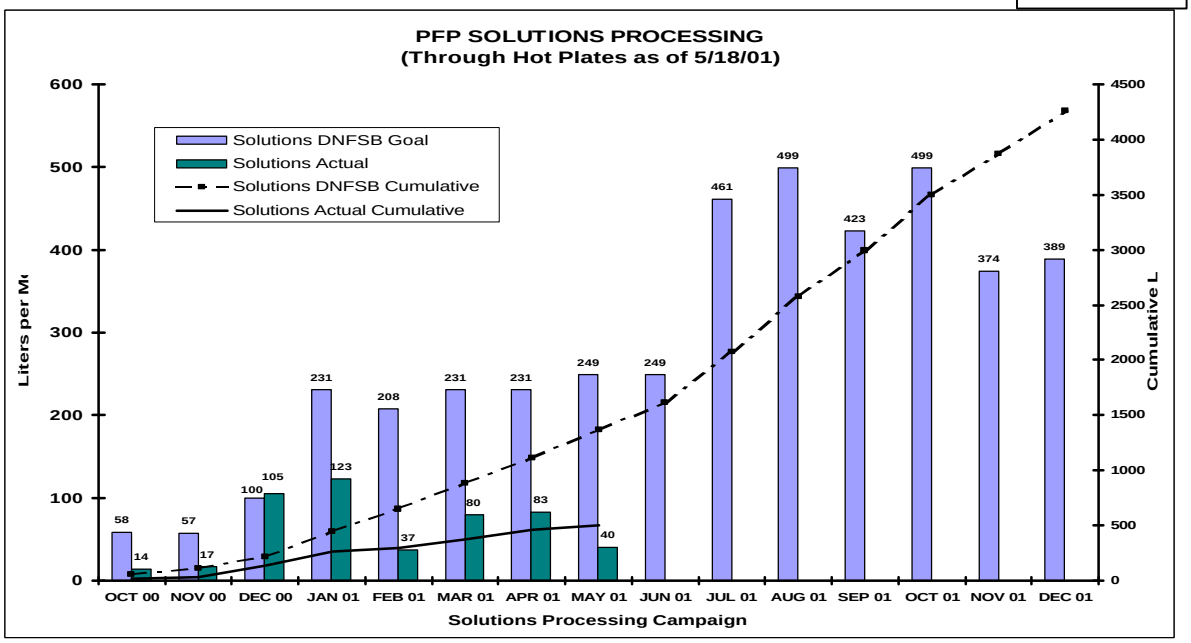
OXIDES/METALS/POLYCUBES STABILIZATION



Sixty (60) metal items were brushed and canned into a Bagless Transfer Container (BTC). Fabrication of the BTC/3013 can-piercing device is expected to be completed in early June.

SOLUTIONS STABILIZATION

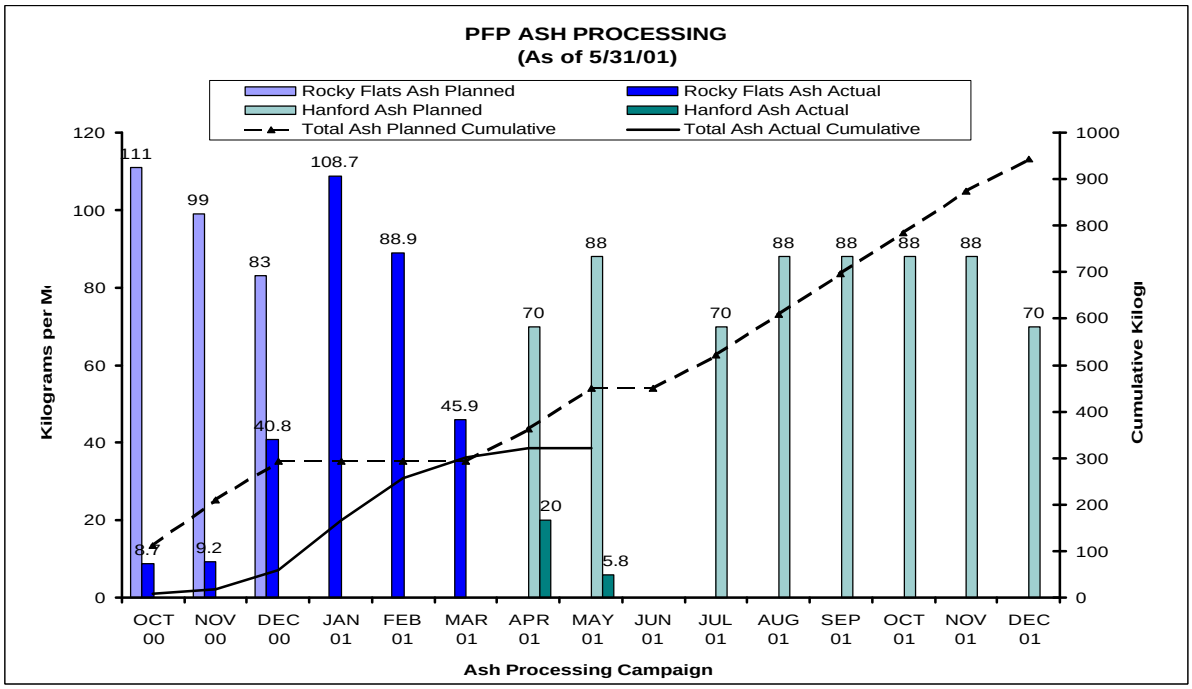
Red



The behind schedule status is due to the quantity of the boats generated per liter of solution from the precipitation process being significantly higher than forecasted in the baseline.

Residues Stabilization

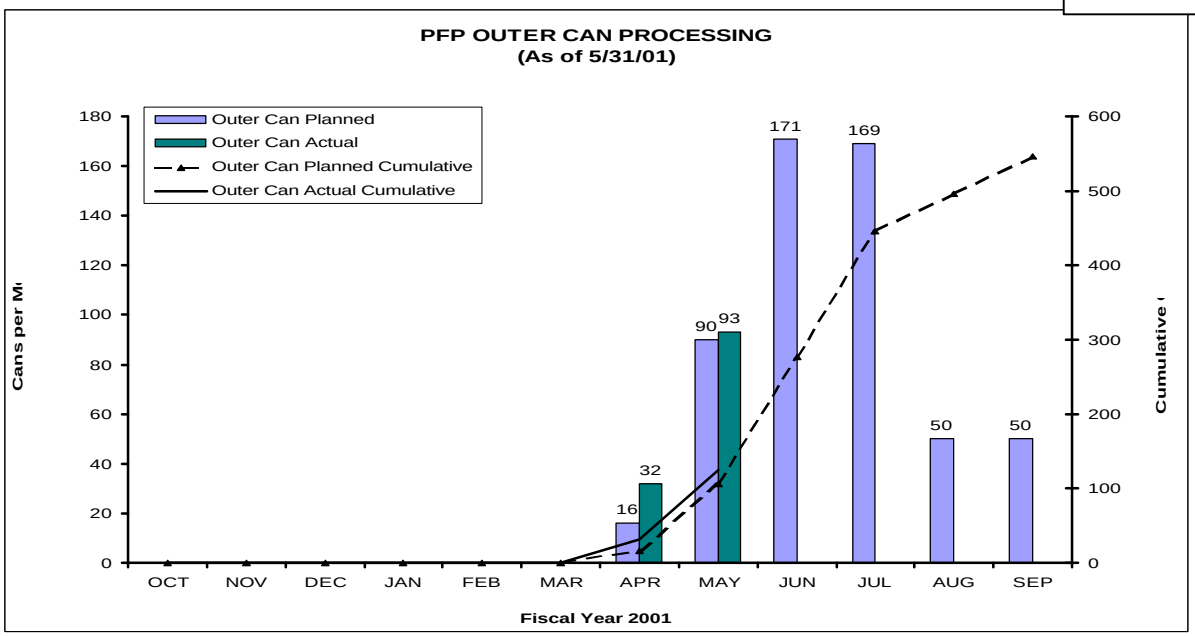
Green



During April a total of 18.1 kilograms of Hanford Ash were packaged. The first shipment of Hanford Ash to the Central Waste Complex was completed on May 17, 2001.

PFP Outer Can Processing

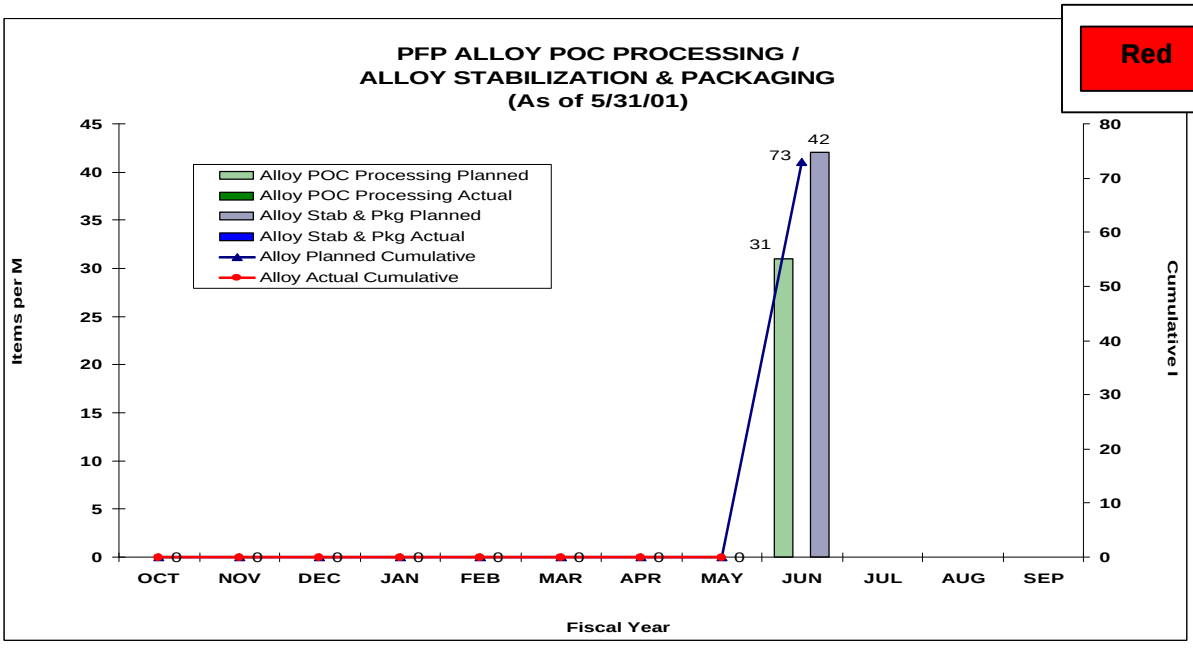
Green



Successfully initiated startup operation of the Outer Can Welder (OCW) on April 10, 2001 to package plutonium to DOE-STD-3013 CRITERIA. Through May 31, 2001 the OCW has produced one hundred and twenty-five (125) DOE-STD-3013 containers.

ALLOY POC PROCESSING/ALLOY STABILIZATION & PACKAGING

Red



Preliminary activities for alloys stabilization are behind schedule due to priority placed on metals stabilization. Expected start date for alloys stabilization is currently June 14, 2001. Completion is now projected for early August. Group 3 alloys' characterization and stabilization activities continue on schedule.

FY 2001 Schedule / Cost Performance – All Fund Types
Cumulative to Date Status – ($000)

Yellow

By PBS		FYTD BCWS	BCWP	ACWP	SV	%	CV	%	PEM	EAC
WBS 1.4.5 PBS TP05	PFP Deactivation	$ 60,088	$ 54,873	$ 62,811	$ (5,215)	-9%	$ (7,938)	-14%	$ 107,794	$ 111,720
	Total	$ 60,088	$ 54,873	$ 62,811	$ (5,215)	-9%	$ (7,938)	-14%	$ 107,794	$ 111,720

Authorized baseline as per the Integrated Planning Accountability, and Budget System (IPABS) – Project Execution Module (PEM).
Note: The above cost variance includes additional $2.3M RL holdbacks for steam, laundry, and Interoffice Work Orders to the Savannah River Site in support of Project W-460.

FY to Date Schedule / Cost Performance

Overall, the NMS Project through April 2001 has an unfavorable schedule and cost variance of <$5.2M> and <$7.9M>, respectively. The majority of the unfavorable schedule variance, due to delays in Project W-460 construction and installation, solutions, residues, metals and alloys stabilization activities, is anticipated to recover prior to year end, except for solution stabilization which will likely remain behind schedule. The unfavorable cost variance, due to increased costs in Project W-460 design and construction, acceleration of Project W-460 vault racks and schedule recovery, 234-5Z bagless transfer operational difficulties and unrecoverable costs from Rocky Flats ash processing, will also significantly improve by year end. See the detail in the following sections of this report for more information.
While the April 2001 adjusted spend forecast for the NMS Project, $94,7M, does exceed available funds, $91.0M, Fluor reinvestment funding consistent with accelerated work scope now in progress, such as Hanford Ash processing, is anticipated. This reinvestment funding, along with directed Project reductions in discretionary spending on materials and contracts plus tightened controls on overtime, will adjust the potential real cost variance at year end to zero or below. The detailed cost variance that follows does not address fee allocation ($253K) or the additional $2.3M RL holdbacks for steam, laundry, and Interoffice Work Orders to the Savannah River Site in support of Project W-460.

For all active sub-PBSs and TTPs associated with the Operations/Field Office, Fiscal Year to Date (FYTD) Cost and Schedule variances exceeding + / - 10 percent or one million dollars require submission of narratives to explain the variance.

Schedule Variance Analysis: (-$5.2M)

Maintain Safe & Secure SNM (-$250K) - 1.4.5.1.10
Description and Cause: The unfavorable schedule variance is primarily due to delays in procurement and field installation activities, which support the emergent Remote Material Surveillance System (RMSS) installations in 234-5Z and 2736-ZB. This work scope was incorporated via Baseline Change Request FSP-2001-009.
Impact: At this time there are no significant impacts to completion of the RMSS upgrade or related work scope (Remote CCTV Surveillance Cameras and Proximity Card Readers). Completion of the installation and testing activities are now forecast for the end of August FY01.
Corrective Action: No corrective action is required at this time.

Maintain Safe & Compliant PFP (-$794K) - 1.4.5.1.11

Maintain Integration Of Program (-$170K) - 1.4.5.1.11.1
Description and Cause: The unfavorable variance is due to the late start on the PFP parking lot caused by a delay in initiating the S/RID Phase I Assessment. Verbal approval was provided by DOE-RL on 2/21/01 for the Annual Update. However the Phase I Assessment activity cannot proceed until formal DOE-RL approval is granted, which places this task significantly behind schedule.
Impact: The later than planned start of the Phase I S/RID Assessment will negatively impact the Phase II S/RID Assessment that is currently forecast for completion during the second quarter of FY02 (required to maintain the PFP Operations Envelope).
Corrective Action: Management emphasis needs to be focused on this Phase I Assessment activity completing in FY01. The S/RID Phase I and II Assessment's need to be carefully monitored with appropriate funding provided in FY02 to complete the Phase II Assessment on schedule for Facility compliance.

Maintain Worker/Public Health and Environmental Safety ($36K) - 1.4.5.1.11.2
Description and Cause: This variance is within the reportable threshold limit.
Impact: None.
Corrective Action: None required.

Maintain Compliant Facility ($.3K/) - 1.4.5.1.11.3
Description and Cause: This variance is within the reportable threshold limit.
Impact: None.
Corrective Action: None required.

Facility System And Components (-$660K) - 1.4.5.1.11.4
Description and Cause: The negative schedule variance is due to the late start on the PFP parking lot expansion, delays in procurement of unit #1 and #2 air conditioning units for 2736-ZB and delayed installation of new Canberra continuous air monitors (CAMs). These activities were all initiated during April but with minimal progress. Also contributing to this variance is the delayed start on the 25 MREM boundary and horn coverage upgrade due to resources being assigned to higher priority workscope.
Impact: No impact is expected. It is anticipated that despite the late start, the majority of activities will be completed by yearend.
Corrective Action: Issue contracts after W460 work is completed to perform the 25MREM boundary and horn coverage.

Stabilization of Nuclear Material (-$1,799K) - 1.4.5.1.13

Metal Processing (-$542K) - 1.4.5.1.13.01
Description and cause: As noted in the cost variance analysis, the availability of the BTS has been extremely poor, causing the rate of metals processing to be much lower than planned.
Impact: The projected date for completion of metals stabilization is now mid June assuming a three item per day production rate. This will delay the completion date for subsequent stabilization and packaging efforts including the metals oxides (corrosion products), alloys and solutions.
Corrective Action: Efforts are being made to improve the reliability of the BTS by bringing in staff from Savannah River who are familiar with the system. Plans are underway to begin processing alloys early in an attempt to meet the June 30 milestone.

Residue Processing (-$.7K) - 1.4.5.1.13.02
Description and cause: The schedule variance is within the reportable threshold limits.
Impact: None.
Corrective Action: None required.

Solutions Processing (-$1,067K) - 1.4.5.1.13.03
Description and cause: Approximately one third (32%) of the schedule variance is associated with the Prototype Vertical Denitration Calciner (VDC) testing. Testing of the Prototype VDC is included in the project baseline but is no longer planned. Over half (56.4%) of the schedule variance, is the result of the production rate being below the rates reflected in the baseline schedule. Boat production rates improved mid-way through April with the shift to processing the Criticality Mass Lab solutions. The remaining 11% schedule variance is associated with the safety analysis, environmental, criticality and permitting tasks to support use of the W-460 furnaces for Solutions stabilization starting in September 2001.
Impact: There are no impacts from the variances associated with the Prototype VDC. A baseline change request is being prepared to remove this scope from the baseline. Impacts on the project end date as a result of the increasing variance associated with the production rate are still being reviewed. All efforts have been on improving process throughput. Environmental, criticality, and safety engineering are starting preparation of documentation to support the tasks associated with the W-460 furnace usage, to support Solutions stabilization.
Corrective Action: Schedules for evaluating and implementing alternate disposition pathways for the solutions (an oxalate precipitation process and direct disposition of solutions) have been developed and are being updated on a weekly basis. Decision milestones for each of these processes are scheduled in June 2001.

Polycube Processing (-$190K) - 1.4.5.1.13.04
Description and cause: Criticality analyses, specifications and postings needed to perform polycube stabilization are running behind schedule due to their lower priority in comparison with metals, solutions, and alloys stabilization.
Impact: No significant impacts are anticipated as all preparatory activities to demonstrate polycube stabilization as well as actual stabilization of several polycubes is anticipated to be completed this fiscal year.
Corrective Action: None required.

Material Stabilization Project Management (-$.9K) - 1.4.5.1.13.06
Description and cause: This variance is within the reportable threshold limit.
Impact: None.
Corrective Action: None required.

Disposition of Nuclear Material (-$2,357K) - 1.4.5.1.14

Disposition of Nuclear Material (Expense) (-$1,149K) - 1.4.5.1.14
Description and Cause: The unfavorable variance is due primarily to the following activities that were scheduled to start or complete by the end of April but will be deleted when the Alloy change request is approved and replaced with activities scheduled in June: 1) The Disposition Aluminum Alloy activities have not started since the plan has changed from shipping the alloys to SRS to placing the alloys in pipe overpack containers (POCs) and shipping them to the Central Waste Complex. 2) The Manage TRU Waste activities will be deleted and replaced with the activities to handle and transport the POCs to the Central Waste Complex. 3) The activity to purchase alloy containers will be deleted and replaced by an activity to purchase POCs for the alloys. Change request FSP-2001-024 to delete and replace this work scope will be implemented in May.

Impact: The metal processing behind schedule condition will be recovered this fiscal year as the metal processing is completed (possibly as late as August 10, 2001), however, this will drive solutions inner canning behind schedule at yearend.
Corrective Action: Approve the change request to remove the Disposition Aluminum Alloys activities from the baseline (Change request FSP-2001-024).

Disposition of Nuclear Material (Capital) (-$1,208K) - 1.4.5.1.14
Description and Cause: The W-460 project unfavorable variance is primarily due to equipment and material procurements scheduled through April that cannot claim performance until the equipment/material arrives onsite. This schedule variance will be recovered this fiscal year when the equipment and material is delivered. The NDA Lab Equipment has an unfavorable variance because no progress was taken on this activity since the work is being performed by SRS via an internal work order – ($535.1K) (a change request will be written to remove this work scope from the budget). The unfavorable schedule variance is partially offset by the favorable schedule variance for the Vault Construction - $75.0K (Design is complete and a contract will be let to construct the vault racks.) and the Facility Mods Construction - $106.7K (The Apollo construction schedule is more aggressive than the origin plan.).
Impact: The W-460 Project behind schedule condition will be recovered when the equipment/material arrives onsite and the Bagless Transfer System operation documents preparation and training will recover as the system is started up.
Corrective Action: Project W-460 construction has been accelerated and is forecast to complete by July 30, 2001.

Transition the PFP (-$33K) - 1.4.5.1.15
Description and Cause: The unfavorable variance is primarily attributable to a moderate versus urgent priority for replacement of a power pole near 241-Z-361 Tank and a later-than-planned start on the Tank Characterization Report (TCR).
Impact: None.
Corrective Action: The work package for the power pole has been approved and is now being scheduled. Development of the Tank Characterization Report is progressing and will be completed in July.

Cost Variance Analysis: (-$7.9M)

Maintain Safe & Secure SNM ($55K) - 1.4.5.1.10
Description and Cause: The favorable cost variance is artificial due to a significant understatement of surveillance labor costs, material that has been delivered but not costed, and higher than planned subcontract costs in support of Project W-460. Performance of monthly ad hoc International Atomic Energy Agency (IAEA) inventories continues to be more efficient than baseline expectations.
Impact: The redistribution of labor costs and higher than planned subcontract costs are forecast to exceed FY 2001 budget guidance.
Corrective Action: A cost transfer from WBS 1.4.5.1.11 will be directed to this cost account to properly record ongoing bargaining unit support for the Micon Control Room operations.

Maintain Safe & Compliant PFP (-$1,329K) - 1.4.5.1.11

Maintain Integration Of Program ($114K) - 1.4.5.1.11.1
Description and Cause: The favorable cost variance is primarily due to redirection of exempt staff to support the stabilization process projects as well as Engineering and Quality Assurance staff shortages. Subcontractor costs and telephone and computer assessments are unfavorably offsetting this favorable variance.
Impact: None. A favorable variance is projected at yearend.

Corrective Action: Assessed telephone and computer costs applicable to stabilization project management will be cost corrected from business management to the Stabilization Projects as appropriate.

Maintain Worker/Public Health and Environmental Safety ($723K) - 1.4.5.1.11.2
Description and Cause: The favorable cost variance is due to resources being assigned to support higher priority Project W-460 workscope. Also contributing to this positive variance is close monitoring of charging practices for training and less than planned emergency drill exercises.
Impact: No impact.
Corrective Action: This positive variance is expected to decline as contracts are issued to support nuclear safety.

Maintain Compliant Facility ($67K) - 1.4.5.1.11.3
Description and Cause: The favorable cost variance is due to efficiencies within the Waste Management Program activities, exempt staff support to the stabilization process projects, and a staff underrun within the Solid Waste Operations organization.
Impact: This account is expected to further benefit through continued staff efficiencies in performing the assigned workscope.
Corrective Action: None required. Efficiencies within this account are expected to continue.

Facility System And Components (-$2,232K) - 1.4.5.1.11.4
Description and Cause: The majority of this unfavorable cost variance is attributable to an increased Bonneville Power Association assessment, higher than planned use of bargaining unit personnel and material required to support the stabilization processes, and accelerated procurement of backflow preventers.
Impact: In WBS 11.04.02 the projected overrun is expected to be primarily offset by underruns in other cost accounts within WBS 1.04.05.01.11. Additional impacts will be assessed at the project level.
Corrective Action: The combination of TIS corrections for the Steam Supply Fan Special Project mischarges, submittal of a cost correction ($600K) for the Solid Waste Assessment charges, and implementing overtime limitations will help reduce costs.

Stabilization of Nuclear Material (-$1,020K) - 1.4.5.1.13

Metal Processing (-$973K) - 1.4.5.1.13.01
Description and cause: The stabilization rate of metals has been driven primarily by the availability of the bagless transfer system. Of the available workdays in April, the BTS was fully operational on only three of those days. Labor charging practices for the Nuclear Waste Operators assigned to Thermal Stabilization was carefully reviewed and found to be heavily prejudiced toward charging to metals and oxides stabilization when compared to solutions stabilization and material packaging.
Impact: The estimate at completion is $1211.2K over budget; however this is offset by a projected under run for the polycubes stabilization preparation effort. There is no overall impact in the Thermal Stabilization and Polycubes Project.
Corrective Action: Staff from Savannah River have been brought on site to help with the repair and alignment of the BTS in an effort to improve its reliability.

Residue Processing (-$918K) - 1.4.5.1.13.02
Description and cause: The negative cost variance (overrun) reflects an additional three months processing time for Rocky Flats Ash completing in March 2001. The original baseline plan completed 100% of Rocky Flats Ash by January 2001. Operational issues due to variation in the feed streams and Nondestructive Assay (NDA) issues resulted in a slower startup of repackaging of Hanford Ash than expected but production is increasing to the scheduled repackaging rate.

Impact: The repackaging of Rocky Flats Ash (RFA) is complete and the cost variance will not be recovered. The implementation of process improvements during RFA repackaging has increased production rates that will continue with the processing of Hanford Ash. The project is scheduled to repackage 31 Pu/Al alloys designated as Group 1 in May, which will have limited impacts to the overall residues processing schedule. Baseline Change Requests for Pu/Al alloys (BCR FSP-2001-024) and repackaging of Hanford Ash (BCR FSP-2001-037) have been developed for the work scope and submitted for approval.
Corrective Action: None.

Solutions Processing ($99K) - 1.4.5.1.13.03
Description and cause: The favorable cost variance is attributable to a bargaining unit underrun in the WBS for the "Transfer and Processing of Mg $(OH)_2$ Solutions (1KECGB/110895).
Impact: None.
Corrective Action: None.

Polycube Processing ($597K) - 1.4.5.1.13.04
Description and cause: The favorable cost variance is attributable to costs for preparation of safety analysis, environmental documentation, permitting, and project management that has been significantly less than anticipated due to the simplicity of the direct thermal stabilization plan.
Impact: The projected cost under run for this fiscal year is approximately $1102.6K. This underrun will be used for completion of metals stabilization, which is costing more than planned.
Corrective Action: None required.

Material Stabilization Project Management ($176K) - 1.4.5.1.13.6
Description and cause: The favorable cost variance is primarily attributed to under-runs in new bargaining unit employee training due to delays in hiring additional staff. Also contributing to this positive cost variance phones and computer charges that have been incorrectly applied to another account.
Impact: None.
Corrective Action: The cost variance has been trending positive for the last several months and will continue to do so until additional bargaining unit staff is hired. Offsetting this variance is an increase in subcontract charges and greater then planned charges for dosimetry/medical. It is expected that these charges will continue. Note: A cost transfer will be processed to move costs from WBS 1.04.05.01.11.01 for telephone and computer services into this account. These services are planned in both accounts, however the majority of actual costs have been applied to WBS 1.04.05.01.11.01.

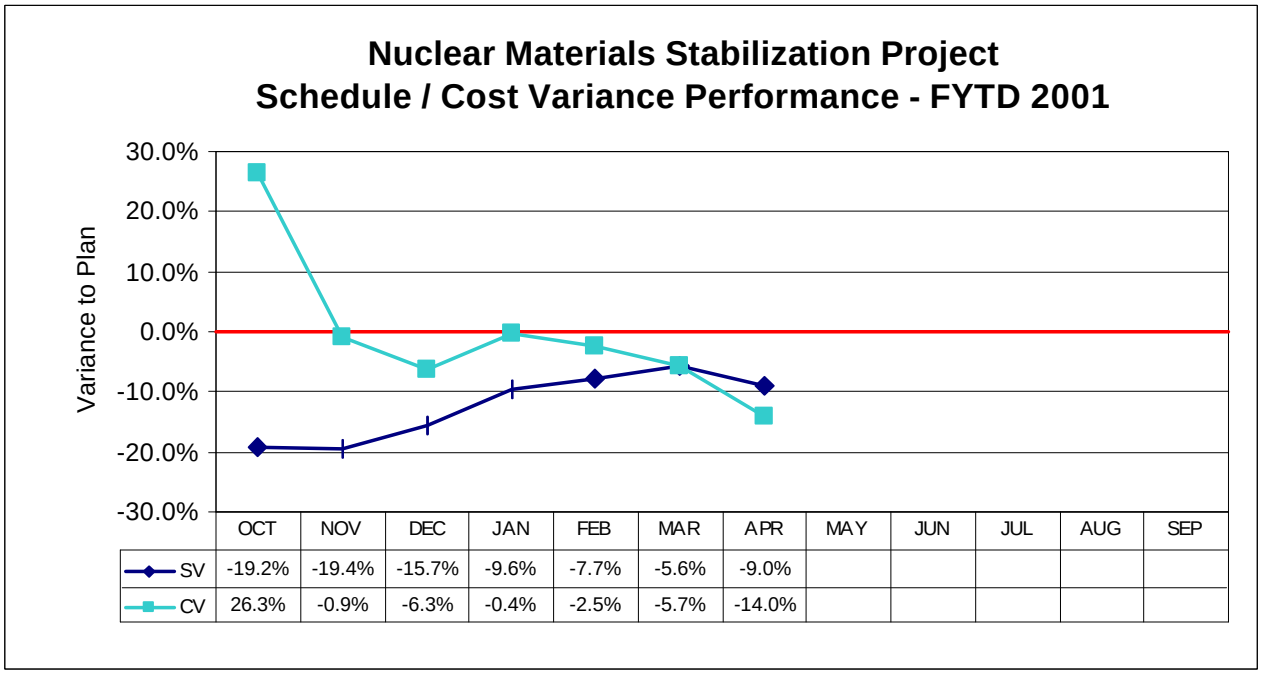
Disposition of Nuclear Material (-$3,580K) - 1.4.5.1.14

Disposition of Nuclear Material (Expense) (-$1,487K) - 1.4.5.1.14
Description and cause: The expense overruns are primarily due to preparation of operational/project documentation such as criticality and SAR documents, plant support for the project, project escorts and PIC support. The cost overrun in the Project Management cost account is primarily due to unplanned plant delays that were invoiced by FFS, FFS support for criticality work, and accelerated glovebox fabrication costs.
Impact: Expense overruns are expected to continue. The yearend variance is now projected to be $1,255.9K. Funds management will be used to offset the overruns.
Corrective Action: Continue to monitor the overrunning cost accounts to determine if the overruns are offset by underruns in other cost accounts.

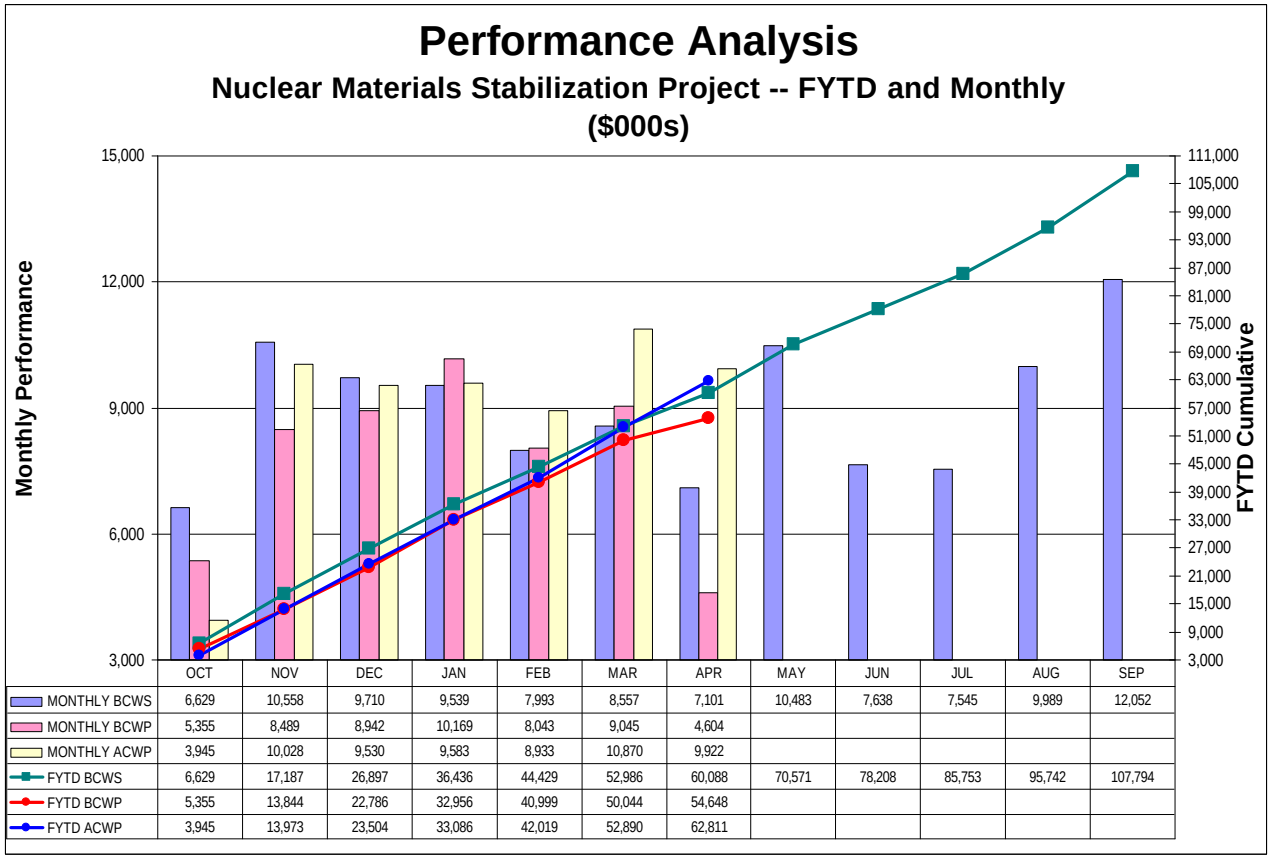
Disposition of Nuclear Material (Line Item) (-$2,093K) - 1.4.5.1.14
Description and cause: Line item overruns are primarily due to overruns in engineering during construction, construction support, plant support for construction, and accelerated vault re-rack work.
Impact: Several options are being evaluated to resolve the cost overruns, which must be resolved or the project will be forced to furlough the construction forces and project personnel and defer the remaining work scope to FY 2002 when new funds become available.
Corrective Action: A corrective action plan is being developed.

Transition the PFP ($10K) - 1.4.5.1.15
Description and Cause: This variance is within the reportable threshold limit.
Impact: None.
Corrective Action: None required.

SCHEDULE / COST PERFORMANCE (MONTHLY AND FYTD)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
SV	-19.2%	-19.4%	-15.7%	-9.6%	-7.7%	-5.6%	-9.0%					
CV	26.3%	-0.9%	-6.3%	-0.4%	-2.5%	-5.7%	-14.0%					



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY BCWS	6,629	10,558	9,710	9,539	7,993	8,557	7,101	10,483	7,638	7,545	9,989	12,052
MONTHLY BCWP	5,355	8,489	8,942	10,169	8,043	9,045	4,604					
MONTHLY ACWP	3,945	10,028	9,530	9,583	8,933	10,870	9,922					
FYTD BCWS	6,629	17,187	26,897	36,436	44,429	52,986	60,088	70,571	78,208	85,753	95,742	107,794
FYTD BCWP	5,355	13,844	22,786	32,956	40,999	50,044	54,648					
FYTD ACWP	3,945	13,973	23,504	33,086	42,019	52,890	62,811					

FUNDS MANAGEMENT
FUNDS VS SPENDING FORECAST ($000)
FY 2001 TO DATE

Yellow

	Project Completion *			Post 2006 *			Line Items *		
	Funds	FYSF	Variance	Funds	FYSF	Variance	Funds	FYSF	Variance
The Plateau									
1.4.5 **Nuclear Materials Stabilization**									
TP05 **Operating**	$ 89,202	$ 93,265	$ (4,063)						
Line Item							$ 12,140	$ 12,066	$ 74
Total Nuclear Mat. Stab. Operating	**$ 89,202**	**$ 93,265**	**$ (4,063)**						
Total Nuclear Mat. Stab. Line Item							**$ 12,140**	**$ 12,066**	**$ 74**

*** Control Point**

NOTE: Forecast includes planned investment from indirect savings.

ISSUES

Technical Issues

Issue: The quantity of boats from the precipitation process is higher than expected or forecasted in the baseline estimates and schedules

Impact(s): An evaluation of the impact to the original project completion date of December 31, 2001 is expected in June.

Corrective Action(s): Evaluations continue to develop alternate paths to increase throughput and production rates. These include finalizing initial schedules for implementation of an oxalate precipitation process; direct disposition of a portion of the solutions, and operation of a second two-boat hot plate to double the capacity for processing [$Mg(OH)_2$] material prior to the stabilization furnaces The Engineering Change Notice (ECN) and Criticality Safety Evaluation Report (CSER) were approved May 29th for the second two-boat hot plate. Operation of this second two-boat hot plate is expected in June.

Issue: The Super Critical Fluid Extraction (SFE) method does not accurately measure the moisture content from stabilized product such as $Mg(OH)_2$.

Impacts: Has the potential to further extend the project completion date.

Corrective Action: A technical assistance team, formed by Los Alamos and Hanford, continues evaluating the data on the SFE. A final decision is expected by late June.

Issue: A portion of the oxides to be processed contains fairly high levels of chloride. The corrosive properties of the chloride off-gases will cause problems during thermal stabilization.

Impact(s): Completion of oxides stabilization could be impacted.

Corrective Action(s): Various efforts are continuing with the Pacific Northwest National Laboratory (PNNL) and Rocky Flats to resolve the chloride issues (e.g., characterization and pretreatment, as well as other methods). PNNL is requesting funding from the Nuclear Material Focus Area for testing.

Regulatory, External, and DOE Issues and DOE Requests

Issue: No other issues identified at this time.

Impacts: None at this time.

Corrective Action: None at this time.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS

BCR NUMBER	DATE ASSIGNED	BCR TITLE	FY 01 IMPACT	SCH	TECH	DRAFT COPY	TO FH	FH APPROVAL	DOE-RL APPROVAL
FSP-2001-021	13-Dec-00	Additional Cost Savings	($1,672)	---	---		10-Jan-01	10-Jan-01	03-May-01
FSP-2001-024	29-Dec-00	Rebaseline Alloys Stabilization	$86	X	X		08-Mar-01	09-Mar-01	Returned No Action
FSP-2001-037	09-Feb-01	Accelerate Hanford Ash	$3,106	X	X	21-Mar-01	29-Mar-01	On Hold	
FSP-2001-043	15-Mar-01	291-Z-1 Stack Monitor	$363	X	X	23-Apr-01	27-Apr-01	02-May-01	Not Required
FSP-2001-045	23-Mar-01	10 CFR 830, Phase 1	$138	X	X	28-Mar-01	29-Mar-01	02-May-01	Not Required
FSP-2001-046	04-Apr-01	Revise Metals Completion Date	-----	X	---	04-Apr-01	27-Apr-01	07-May-01	
FSP-2001-047	04-Apr-01	3013 Monitoring System, Phase 1	$442	X	X	18-Apr-01	27-Apr-01	02-May-01	Not Required
FSP-2001-048	16-Apr-01	DNFSB Recommendation 2000-2	$25	X	X	23-Apr-01	04-May-01	07-May-01	Not Required

KEY INTEGRATION ACTIVITIES

- Techniques for improving the precipitate processing continue to be worked jointly by staff members of the Plutonium Process Support Laboratories and PNNL.

- A new neutron counter from the Los Alamos National Laboratory will be tested in June jointly with the International Atomic Energy Agency (IAEA) monthly adhoc inspection. The new equipment has the potential to increase Nondestructive Analysis efficiency that will shorten the time for IAEA inventory verification requirements.

- The authorization basis for allowing packaging of oxides including oxidized metals into a BTC is currently contingent upon approval from RL. Resolutions of the risks associated with this activity are currently under evaluation by RL.

- Thermal stabilization of high chloride oxides must include a pretreatment to remove the chlorides. PNNL had been reviewing treatment methods and has presented a cool air quench recommendation for the off-gas.

- The completion of the quality assurance documentation associated with the SGSAS is required to be complete prior to initiation of measurement of Hanford ash. A significant effort is underway to complete the documentation the first part of April. Completion for some of the documents includes review and acceptance by Carlsbad Area Office (CAO). The feasibility of initiating repackaging and measurement of Hanford ash after obtaining Waste Management approval of the documents but prior to CAO acceptance will be evaluated.